

IN THE CLAIMS:

The following is a listing of all the claims in the present application.

1-12. (Cancel)

Kindly add the following new claims:

13. (New) A surgical instrument manipulator system comprising:

a manipulator assembly;

a sterilizable surgical instrument coupleable to the manipulator assembly, the surgical instrument comprising an elongate member with a proximal end, a distal end, a longitudinal centerline therebetween and an end effector coupled to the distal end; and

a sterilizable instrument support sleeve coupleable to the manipulator assembly, the sleeve configured to be insertable through a percutaneous incision in the body of a patient during an endoscopic surgical procedure, the sleeve comprising an axial passage for supporting and receiving the surgical instrument therethrough so that the end effector is disposed adjacent a target site within the body,

wherein the manipulator assembly comprises an actuator drive for manipulating the surgical instrument therewith, the actuator drive configured to engage the surgical instrument so as to transfer at least two motion actuations from the actuator drive to the surgical instrument.

14. (New) The surgical system of claim 13, wherein the elongate member of the surgical instrument rotatably engages the axial passage of the support sleeve, and wherein the at least two motion actuations include rotating the elongate member with respect to the passage.

15. (New) The surgical system of claim 13, wherein the end effector is coupled to the distal end of the elongate member of the surgical instrument by an actuatable wrist

member, wherein the at least two motion actuations include pivoting the wrist member to provide at least one degree of freedom of the end effector relative to the elongate member.

16. (New) The surgical system of claim 13, wherein the end effector is coupled to the distal end of the elongate member of the surgical instrument by an actuatable wrist member having a wrist axis, wherein the at least two motion actuations include rotating the wrist member about the wrist axis to provide at least one degree of freedom of the end effector relative to the elongate member.

17. (New) The surgical system of claim 13, wherein the end effector is coupled to the distal end of the elongate member of the surgical instrument by a steerable bendable member, the surgical instrument assembly further comprising at least one control element releasably coupling the bendable member to the actuator drive of the manipulator assembly, wherein the at least two motion actuations include steering the bendable member to provide at least one degree of freedom of the end effector relative to the elongate member.

18. (New) The surgical system of claim 17, wherein the at least one control element comprises a plurality of cables.

19. (New) The surgical system of claim 13, wherein the end effector is movably actuatable, and wherein the motion actuations include rotation of the surgical instrument about the longitudinal centerline of the elongate member and actuation of the end effector.

20. (New) The surgical system of claim 19, wherein the drive assembly includes a first controllable motor for rotating the surgical instrument about the instrument centerline, a second controllable motor for actuating the end effector on the surgical instrument and a third controllable motor for axially translating the surgical instrument relative to the manipulator assembly.

21. (New) The surgical system of claim 13, wherein the manipulator system further comprises one or more electrical feed-throughs for transferring electrical signals to and/or from the manipulator assembly and the surgical instrument.

22. (New) The surgical system of claim 13, further comprising an input control device located remotely from the manipulator assembly and coupled to a servomechanism of the manipulator assembly so as to permit an operator to remotely control the surgical instrument with the input control device.

23. (New) The surgical system of claim 14, further comprising a plurality of different surgical instruments, the surgical instruments sequentially coupleable to the manipulator assembly so that different surgical instruments may be used during an endoscopic procedure.